Historic, archived document

Do not assume content reflects current scientific knowledge, policies, or practices.

U. S. DEPARTMENT OF AGRICULTURE

FARMERS' BULLETIN No. 767



GEESE CAN BE RAISED successfully and profitably in all parts of the United States, but are most abundant in the Middle West and the South. They subsist very largely on grass during the growing season and are the closest of grazers; therefore they are most economically raised where pastures are abundant and where the grass remains green and tender during long seasons.

Geese can be housed very cheaply, as they need protection only during cold, stormy weather, and in the South they are raised successfully without shelter.

Opportunities for raising geese at a profit are best in sections where geese are fattened commercially to meet the demand for goose flesh in our large eastern cities, especially among people of foreign descent.

Geese for market bring the highest prices during the late fall and early winter months, but these prices are considerably less than those for other kinds of poultry.

Washington, D. C.

Issued February, 1917; revised April, 1928

11

ADDITIONAL COPIES

OF THIS PUBLICATION MAY BE PROCURED FROM
THE SUPPENITEDENT OF DOCUMENTS
U.S.GOVERNMENT PRINTING OFFICE
WASHINGTON, D. C.
AT

5 CENTS PER COPY

GOOSE RAISING

By Alfred R. Lee, Associate Poultry Husbandman, Animal Husbandry Division, Bureau of Animal Industry

CONTENTS

	\mathbf{Page}	·	Page
Goose production	1	Goose breeding-Continued.	
Breeds	1	Selecting and mating	7
Toulouse	2	Incubation	8
Embden	2	Care of breeding geese	10
African	3	Feeding the goslings	10
Chinese	4	Preparing for market	10
Wild or Canadian	4	Noodling geese	12
Egyptian	6	Market demands and prices	13
Goose breeding	6	Killing and dressing	13
Houses	7	Plucking live geese	14

GOOSE PRODUCTION

TEESE ARE RAISED in all parts of the United States, but are most abundant in the Middle West and the South. According to the census of 1920, Illinois, with 195,769 geese, contained the greatest number, but Missouri, Arkansas, and Iowa each have nearly as many. Kentucky, Tennessee, Minnesota, North Carolina, and Texas ranked next in order but each had decidedly fewer geese. The ascendancy in the number of geese kept on farms has passed very largely from the South Central to the North Central States during recent years. About one-tenth of the farms in the United States reported geese. No data on goose production were taken in the agricultural census of 1925. Geese make up only about 1 per cent of the total poultry in the country, and the total number of geese and ducks kept is practically equal. Geese are very hardy, are the closest grazers known, and will get almost their entire living from a good pasture, but can be raised profitably only where they have good range.

BREEDS

All the breeds of geese in the United States are descended from the wild gray goose and have been domesticated for many centuries. Six breeds of geese are recognized as standard in this country, namely, Toulouse, Embden, African, Chinese, wild or Canadian, and Egyptian. The Toulouse, Embden, African, and Chinese are the most popular breeds in the United States, the first two being by far the most popular. Crosses of the standard varieties of geese, especially of the African gander on the Toulouse or Embden, are occasionally made, but without any apparent gain. This cross is in favor with some of the breeders who make a specialty of forced feeding or noodling geese, and also for the production of young "green" geese for market, but is not recommended for average conditions. The common goose found on many farms contains more or less blood of some of the standard breeds and of the wild goose, and is usually

considerably smaller than the standard Toulouse or Embden. It may be greatly improved by crossing with a purebred gander. In addition to the standard breeds there is the so-called mongrel goose, which is a hybrid, generally infertile, made by crossing one of these varieties, usually the Toulouse or African, with the wild or Canadian goose. Geese are kept primarily for the production of flesh and feathers, although their eggs are occasionally used for cooking. Most of the geese kept on general farms in this country weigh from 5 to 10 pounds less than the standard weights for these breeds.

TOULOUSE

The Toulouse goose (fig. 1) derives its name from the city of Toulouse, in southern France, in a territory noted for its geese. The

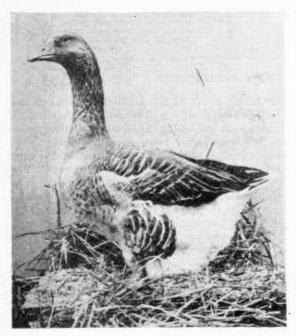


Fig. 1.-Toulouse goose

Toulouse is the largest and most popular of the standard breeds of geese. The standard weights, in pounds, are as fol-Îows: Ádult gander, 26; adult goose and young gander, 20; young goose, 16. This breed has a broad and deep body and is loose-feathered, a characteristic which gives it a massive appearance. The color of the plumage is dark gray on the back, gradually shading to light gray edged with white on the breast, and to white on the abdomen. The eye should be dark brown or hazel, the bill pale orange, and the

shanks and toes a deep reddish orange. The female resembles the male but is smaller. The Toulouse is a fair layer, producing from 15 to 35 eggs a year, is docile, grows rapidly, and makes a good market bird. Its dark pinfeathers, however, make it a slightly less attractive market goose than the Embden—[also spelled Emden]. The Toulouse as a rule is a nonsitter. Egg production is low in most flocks of geese, but can be greatly increased by breeding for eggs.

EMBDEN

The Embden was one of the first breeds of geese imported into the United States, where it was known at first as the Bremen, named after the city from which it was imported. (Fig. 2.) This breed,

however, originated in Hanover, Germany. The present breed name, Embden, is from the German city that made later exportations of the geese to England. The standard weights, in pounds, are as follows: Adult gander, 20; adult goose and young gander, 18; young goose, 16. The Embden is a large white goose, slightly smaller, more sprightly, and much tighterfeathered than the Toulouse. It therefore appears more upstanding. The plumage is pure white. The Embden is a fair layer but usually is not quite so prolifie as the Toulouse, although the egg yield varies greatly among individuals in all the breeds. The Embden is a much better sitter than the Toulouse. The breed makes a very good market bird, as it has white pinfeathers, is a rapid grower, and matures early.

AFRICAN

The African (fig. 3) is a gray goose with a distinct brown shade, which originated in China, though erroneously reported to have come from Africa. It has a distinctive knob or protuberance on its head, and its carriage is more erect and the

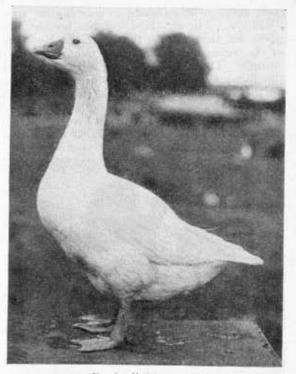


Fig. 2.—Embden gander

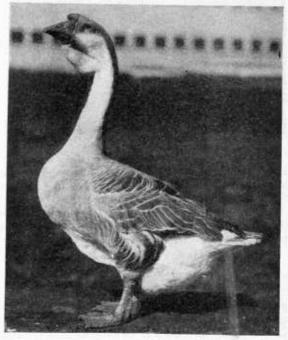


Fig. 3.—African gander

body more nearly oblong and is higher from the ground than the Toulouse. The standard weights for the adult African gander and goose are the same as those for the Embden breed, but the weight of the young gander is 16 pounds and that of the young goose, 14 pounds. The head, knob, and bill are black, the eyes are dark brown, the plumage dark gray on the wings and back and gray or light gray on the neck, breast, and underside of the body. The African is a good layer, about equal in production to the Toulouse, and makes a good market goose. The males are especially liked for crossing with other varieties in producing fancy market products. It is a rapid

grower and matures early, but is apt to be very noisy.

CHINESE

The Chinese geese, of which there are two standard varieties, the Brown and the White (figs. 4 and 5), originated in China. This goose is much smaller than the other standard breeds and more swanlike in appearance. The standard weights, in pounds, are as follows: Adult gander, 12; adult goose and young gander, 10; young goose, 8. The Brown goose has a gravishbrown color which is lighter on the underside of the body, a brown head, a darkbrown or black knob,

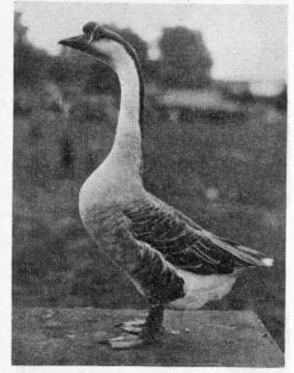


Fig. 4.—Brown Chinese gander

and a black bill. The White Chinese goose has pure-white plumage and an orange-colored bill and knob. Both varieties mature early and are better layers than the other breeds, but lay smaller eggs. They are rapid growers, but are shy and rather difficult to handle. The breed is kept mainly for exhibition. Some geese breeders object to them because of their excessive noise.

WILD OR CANADIAN

The wild or Canadian goose (fig. 6), which is the American wild goose, is of a different species from the other breeds of geese discussed in this bulletin and can be kept in captivity only by close confinement. They are used to ornament private and public parks and are

also in demand by hunters to use as de-Their standcovs. ard weights are the same as those of the Chinese geese, but their conformation is entirely different. They have long and snakelike heads, long and slender necks, and oblong bodies, with horizontal carriage. The wild gander is frequently used to cross with Tou-louse, African, and Embden geese, thereby producing the socalled mongrel goose. The mongrel goose is highly prized as a market goose, as it is a rapid grower and has a fine quality of flesh and has much the appearance of the wild goose.

In color the body of the Canadian goose should be gray or dark gray, the breast light gray, and the lower part of the body white from the legs to the tail. The bill, eyes, head, neck, and tail are black, except for a white stripe on the side of the face. The ganders do not breed until they are 2 years old, and the geese seldom mate until the third season. They mate in pairs only and seldom change mates unless one of them dies. They lay but few eggs—from four to eight in a season—which should be hatched by the goose.

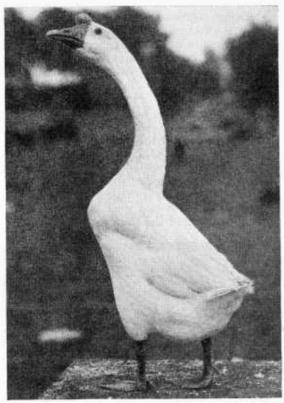


Fig. 5 .- White Chinese gander



Fig. 6.-Wild or Canadian gander

The eggs require 30 days to incubate and seldom fail to hatch, and there is practically no loss in the young except by accident. This breed likes to nest on dry ground near the water, using straw, hay, or leaves for nesting material. At nesting time the geese are very cross and defend their nests and young against all encroachments.

EGYPTIAN

The Egyptian is a long-legged but small, brightly colored goose adapted only for ornamental purposes and rarcly kept in this country. It resembles the wild goose in shape, but each class weighs 2 pounds less than wild geese of the corresponding class. The bill is purple or bluish red, and the legs and toes are reddish yellow. The color of the plumage of the back and body is gray and black, and the lower part of the body pale buff or yellow, penciled with black. The breast is chestnut and gray, and the tail is black. The wings are a glossy black, and the shoulders white.

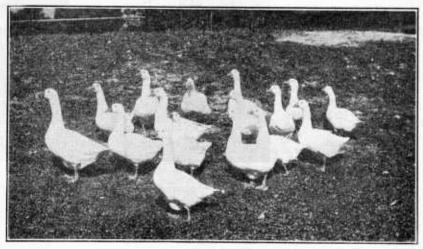


Fig. 7.—Flock of Embden geese on pasture

GOOSE BREEDING

Practically all the geese in this country are raised in small flocks on general farms, and few, if any, farms are devoted entirely to raising geese. The fattening of geese, however, is conducted as a special business on a large scale in the producing sections, the geese being collected from general farms, usually over a large area, and fattened for a few weeks before being killed. In other sections, especially in Wisconsin, geese are raised rather extensively and fattened on the farms. A special trade for Wisconsin specially fattened geese has been built up in New York City and other large castern cities.

Geese can be raised successfully in small numbers and at a profit on farms where there is plenty of grass or pasture land with a natural supply of water. (Fig. 7.) Geese, both young and old, are very hardy and are rarely affected by any disease or insect pests. Grass makes up the bulk of the feed for geese, and it is doubtful whether it pays to raise them unless good grass range is available.

Geese are the closest grazers known, and both mature geese and partially grown goslings will get their entire living from a good pasture so long as the grass remains green. Moist pasture land makes excellent grazing. It is important not to overstock the land, as to do so may kill the grass. This condition may be prevented by using two or more fields in rotation. A body of water where the geese can swim is considered essential during the breeding season and is a good feature during the rest of the year. If there is no natural pond, an artificial one or tanks may be supplied to advantage.

The market for geese is not so general as for chickens; this fact should be considered in undertaking to raise geese. The demand and the price paid for geese are usually best in sections where goose fattening is conducted on a large scale, but the price is materially lower than those paid for other kinds of poultry. Many geese are kept in the South largely for the production of feathers rather than for their flesh, but as the use of feathers is not so general as it has been that phase of goose raising is less profitable than formerly.

HOUSES

Except in winter or during stormy weather, when some protection should be provided, mature geese seldom need a house. Protection from snow in the winter and provision for shade in the summer are necessary. Some kind of shelter, such as a shed open on the south side, a poultry house, or a barn, is usually provided by breeders in the North and is used by some breeders in the South. Coops, barrels, or some other dry shelter should be provided for young goslings. The goose houses should be kept clean, and plenty of clean straw or shavings should be provided for the floor during the winter.

SELECTING AND MATING

Geese, like other kinds of poultry, should be selected for size, prolificacy, and vigor. Extremely large size is not desirable in breeding stock. The medium-sized birds are the best breeders. They should be mated several months prior to the breeding season to obtain the best results; therefore breeding stock should be bought in the fall and all changes in matings made then. Goose matings are not changed from year to year except when, as sometimes happens, the gander fails to mate with certain geese, new matings are necessary. If the matings are changed, it is usually necessary to keep the previously mated geese so far apart that they can not hear each other.

Sex is difficult to distinguish in geese, especially when they are young. The gander is usually somewhat larger and coarser than the goose and has a shrill, high voice, while the female has a harsh, coarse cry. The gander has a longer neck and a larger head. The sex may be determined by inspecting the sexual organs or by the actions of the geese at mating time. The sphincter muscle which closes the anus of the female appears folded if stretched, while a light pressure around the vent in the male will make the sexual organ protrude. This test is made to advantage only just preceding or during the breeding season and on mature geese. In common geese the male is lighter colored than the female.

A gander may be mated with from one to four geese, but pair or trio matings usually give the best results. A young gander is usually

mated with only one or two geese. The wild gander usually mates with only one goose. Geese are easily disturbed and should always be managed and handled gently. When mated, geese are allowed to run in flocks, but each mating may be kept in a colony by itself during the breeding season to keep the ganders from fighting. From 4 to 25 geese may be kept on an acre of land, and under most conditions 10 is a fair average. Fences 2 or 3 feet high will keep geese confined in good-sized yards. Wherever possible the geese should have free range on grass or stubble. Many people in the South keep them to kill the weeds in the cotton fields.

Toulouse and Embden geese breed and produce some stock in their second year, but do not mature or give best results before the third year. They sometimes lay the first year; but if their eggs are hatched the geese should be marketed and not kept for breeding. The first eggs laid are often infertile and may be used for cooking. The females are usually kept until they are from 8 to 10 years old, or as long as they lay well, but ganders are seldom kept after they are 6 or 7 years old. Wild ganders, however, are kept as long as they will breed, and usually do not breed until their third year. Yearling ganders of the domestic breeds are often used for breeding, and both sexes are usually best for breeding when from 3 to 5 years old. Mating at an early age tends to promote early breeding.

INCUBATION

Geese are fed a ration to produce eggs during the latter part of the winter (about February 1 in the northeastern section of this country) or so that the goslings will be hatched by the time there is good grass pasture. They are allowed to make nests on the floor of the house, or in large boxes or barrels, or shelters scattered on range are provided for that purpose. The eggs should be collected daily and kept in a cool place where the contents will not evaporate too freely; if kept for some time they may be stored in loose bran. Eggs laid by the wild goose are usually left in their nest. The eggs laid before the goose becomes broody are usually set under hens, while the second laying may be hatched under either hens or the goose. If the eggs are not removed from the nest in which the goose is laying she will usually stop laying sooner than if they are taken away. desire to sit can usually be broken up by confining her to a slatbottom coop, with water to drink and very little feed, for from two to four days. The goose is usually allowed to sit in the same nest in which she has laid, as it is very difficult to make her sit in a new place. Many breeders prefer to raise all the goslings under hens, as geese sometimes become difficult to manage when allowed to hatch and rear their young. From 3 to 7 eggs may be set under a common hen, and from 10 to 15 under a goose, depending on the size of the hen or goose and on the season of the year. Eggs set under a hen should be turned by hand the same as in an incubator, as they are too large for the hen to turn readily. Hens used for hatching goose eggs must be treated with insect powder and have good attention, because the period of incubation of goose eggs is much longer than that for hens' eggs. Apply the insect powder to the hens thoroughly two or three days before the goslings are due to hatch. Goose eggs may be hatched in incubators and the goslings successfully raised in brooders, although it is not a common practice.

The period of incubation varies from 30 days in the small breeds to 34 or 35 days in the large breeds. This period is about 35 days for the wild goose. Incubators should be run at a temperature between 101.5° and 102.5° F., or about 1° lower than for hens' eggs, with the thermometer just clearing or barely touching the top of the eggs. Goose eggs in an incubator should be cooled longer than hens' eggs, beginning about the tenth day. Toward the end of the hatch cool the eggs down to a temperature between 80° and 85°. The incubator may be operated at the same temperature as for hens' eggs, with a lower total heat obtained by the longer cooling period given the goose eggs. Moisture should be added to the eggs after the first week if set in incubators; this is usually done by sprinkling the eggs with lukewarm water. Soak the eggs from one-half to one minute in warm water (100°) every two or three days after the fifteenth day and daily during the last week. When goose eggs are hatched by natural methods, moisture should be added the same as for those in an incubator, unless they are set in a damp place. Goose eggs set in incubators or under hens are usually tested about the seventh day, and those which are infertile or contain dead germs are removed, but eggs under geese are not commonly tested.

Goslings hatch slowly, especially under hens, but usually should be left alone at hatching time unless some hatch much earlier than the others, in which case the first arrivals may be removed and kept warm until the hatching is finished. Goslings hatched under hens should be examined for head lice, and a little grease—lard or vase-line—should be applied with the fingers to their heads and necks. To keep a record of their age and breeding, the web of the feet of the

newly hatched goslings should be punched.

Some breeders who have two or more hatches coming off at the same time from both hens and geese give all the goslings to the geese, which are the best mothers. Goslings raised under geese need very little attention. A few breeders prefer to brood the goslings artificially, keeping them from one to three weeks in the house at night in a covered basket or box. Goslings brooded by hens or in brooders should be confined to yards containing plenty of growing green feed and given very close attention for the first few days. In mild weather the hens are allowed to brood the goslings for from 7 to 10 days, after which the goslings are able to take care of themselves.

As it is very necessary to keep the young goslings dry, they are usually kept confined in the mornings until the dew is dried off, and they should not be allowed to get into water until they are partly feathered. This occurs when they are from 2 to 4 weeks old, depending on the weather and their range. Goslings caught and apparently drowned in a cold rain may be revived by drying in flannel near a fire. Good-sized, growing coops with board floors should be provided for the goslings, and they must be protected from their enemies. When on range, young goslings need some attention, as they may get lost or caught in post holes and odd corners. Young goslings should have good grass yards, and the coops should be removed frequently to fresh grass. It is better to keep the growing goslings separate from the old stock. Shade should be provided in hot weather. If very young goslings are allowed to run with large animals, they may be injured or killed.

CARE OF BREEDING GEESE

Geese are raised generally where they have a good grass range or pasture, and, except during the winter months, usually pick up most of their living. The pasture may be supplemented with light feeds of home-grown grains or wet mash daily, the necessity and quantity of this feed depending on the condition of the pasture. During the winter, when pasture is no longer available, they should have both grain and roughage, but great care should be taken not to overfeed the breeders so that they will become too fat, with the consequent result of poor fertility and unsatisfactory hatches. Oats make a desirable grain feed for breeding geese, but a limited portion of corn, wheat, or barley may be added for variety. The greater part of the feed, however, should be made up of roughage, such as vegetables, clover, or alfalfa hay, chopped-corn stover, or silage. is a good feed if it does not contain too much corn and is free from mold. It is desired to have the geese lay early, so that the first goslings will hatch by the time there is green grass for pasture; and as the breeding season approaches it is necessary to increase the quantity of feed slightly and add to it a mash, which is usually given in the morning, and may be made of 3 parts bran or shorts, 1 part corn meal, and one-fourth part meat scrap; or buttermilk may be used in place of meat scrap. This mash should be fed with the vegetables or roughage. Grit and ovster shell should be kept before the geese when they are laying and may be provided all the time to advantage. Drinking water should be available at all times, and it is best supplied in drinking fountains or vessels so constructed that the stock can not get their feet into the water.

FEEDING THE GOSLINGS

Goslings do not need feed until they are from 36 to 48 hours old, when they should be fed stale bread soaked in milk or water, scalded cracked corn, or a mash made of 4 parts corn meal and 1 part middlings. Green grass should make up most of their feed, and only a very limited amount of grain should be used. Plenty of fresh clean drinking water should be supplied. After two or three weeks, if the goslings have plenty of grass, they will usually not need any other feed. If extra feed is needed use a mash of 2 parts shorts and 1 part of corn meal or ground oats. After they are six weeks old, if they still need extra feed change the mash to equal parts shorts, corn meal, and ground oats, with 5 per cent meat scrap. Where the pasture is good, most goslings are raised from the time they are 2 or 3 weeks old to fattening time without any additional feed. (Fig. 8.) Whole grains should not be fed until the goslings are well feathered.

PREPARING FOR MARKET

In a few sections young geese, when fully feathered or when the long flight wing feathers reach the tail (fig. 9) are fattened in large numbers by buyers who make a specialty of this business. Different methods are used successfully in the special fattening of geese on a large scale. The owner of a goose-fattening farm in the Middle West buys large numbers of geese and fattens them for one month in an orchard or cornfield in flocks of 1,000 or more. (Fig. 10.) No

shelter is provided other than that of trees or standing cornstalks, except in unusually severe weather, when the geese are driven into sheds. Corn on the cob and plenty of water are kept before the geese all the time, and they eat the leaves off the cornstalks for

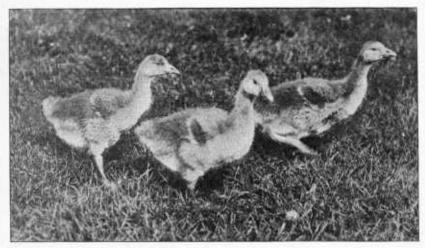


Fig. 8.—Toulouse goslings about 5 weeks old

roughage. They are then shipped alive in a poultry car to the New York market.

Some farmers fatten their own geese. The geese may be "pen fattened" in flocks of from 20 to 25 and fed three times daily, one

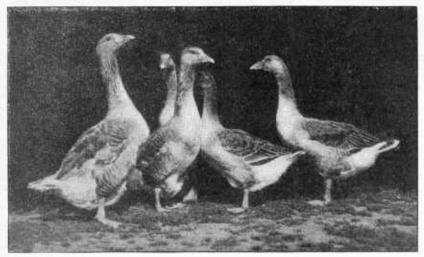


Fig. 9.—An example of the very rapid growth of well-fed Toulouse goslings. The two on the right and the one in the rear are young geese about 12 weeks old

feed of a moist but not sloppy mash made of one-third shorts and two-thirds corn meal being given and two feeds of corn with some oats or barley. The pens should be kept partly darkened, and the geese should be disturbed as little as possible. It is important to use

plenty of bedding of oat straw, both to keep the pens clean and to provide roughage, as the geese will eat a considerable quantity of the straw. Some roughage or vegetables should be provided. An increase in weight of from 4 to 6 pounds can be obtained by this method of feeding.

NOODLING GEESE

Another method which produces a much better fattened goose but involves considerably more work is to stuff large geese with noodles three or four weeks. From 8 to 10 geese are confined to a pen about 8 by 12 feet, which is kept heavily bedded with fresh oat straw. The feeder sits on a box in one corner of the pen, holds the goose between his legs and stuffs it with noodles, usually beginning by feeding from 3 to 5 noodles three times daily and gradually increas-



Fig. 10.—Flock of geese being fattened on a goose-fattening farm

ing to 6 or 7 noodles five times daily at four-hour intervals. The noodles are made of scalded eorn meal, ground oats, ground barley, and ground wheat or wheat flour, about equal parts of each being used. Add salt as for bread, thoroughly mix the feed, and put it through a sausage stuffer, cutting the product into pieces $2\frac{1}{2}$ or 3 inches long. Boil them from 10 to 15 minutes, or until they float, in a wash boiler containing a wire rack which stands 11/2 inches above the bottom of the boiler. Dip the noodles in cold water and roll in flour to keep them from sticking together. Pour hot water over the noodles just before they are fed to make them slippery and keep them warm. The number of noodles fed depends on the size and condition of the bird and the judgment of the feeder. The noodles are put into the mouth, one at a time, and worked down by using the hands on the outside of the neck. At the next feeding time, if any feed can be felt in the crop, no noodles are given; otherwise the bird will go off its feed. Keep plenty of drinking water before the geese.

16.18.0

The young ganders are used for this special fattening and any older ganders or geese to be marketed. A partition extending halfway across the pen is used to keep the geese separate as they are fed. The pen is kept dark and the geese are disturbed as little as possible. The feeder usually wears gloves to protect his hands from bites, and the goose is handled by its neck rather than by its legs and held with the back toward the attendant. One man can feed from 50 to 100 geese by this method, but it involves a large amount of work and long hours, the first feed being given at 5 a. m. and the last at about 11 p. m. A high price must be obtained for geese thus fed to make this kind of fattening profitable. Noodling will produce a gain of from 6 to 10 pounds. A price of from 10 to 15 cents a pound above that paid for geese not specially fattened is often received.

MARKET DEMANDS AND PRICES

There is some demand for young geese from June to January, but most of them are sold at Thanksgiving and Christmas. Ten-weeks-old goslings of the largest breeds of purebred geese weigh as much as 10 or 12 pounds when forced for rapid growth and are sometimes marketed at that age as green geese. If not killed at that age they are not suitable for market until they are more than 4 or 5 months old. Large cities containing a considerable foreign population are usually

the best markets for geese.

The average monthly price paid in cents per pound for live geese on the wholesale market in New York City for the year 1927 were as follows: January, 24.3; February, 17; March, 17; April, 16.5; May, 13.4; June, 12; July, 12; August, 13; September, 17.7; October, 21.1; November, 21.6; and December, 23.1. Higher prices are obtained for young green geese specially forced and sold in the summer. These prices were considerably lower than the prices paid in cents per pound for live hens during the same period, which were as follows: January, 33.1; February, 30; March, 29.8; April, 30.9; May, 26.8; June, 24.6; July, 25.1; August, 25.3; September, 26.8; October, 23.3; November, 23.9; and December, 23.9. The number of geese kept on farms in this country has decreased materially in the last 20 years, owing largely to the limiting of available range and partly to the lower prices which have been paid for geese as compared with prices paid for fowls and turkeys.

KILLING AND DRESSING

Geese are usually killed and picked in the same manner as other kinds of poultry, but are much more difficult to pick than hens or chickens. Care should be used in handling the geese at killing time, as the flesh bruises very easily, and the bruised spots detract from the appearance of the dressed product. The jugular vein in the throat just below the base of the skull is cut through the mouth with a long-bladed knife. As soon as the vein has been cut the goose is stunned either by a hard blow on the back of the head or by plunging the point of the knife into the brain through the roof of the mouth.

The wings are picked to the first joint, and the feathers are removed from the neck halfway to the head, pulling with the feathers and not back toward the head. The soft pinfeathers and fine down may be partly removed by rubbing the body with moistened hands or by shaving the skin. The dry picking of geese is rather difficult,

and the most common practice is to scald or steam the feathers before picking. This can be done over a wash boiler three-fourths full of boiling water, laying the dead goose on a burlap sack stretched tightly over the top of the boiler and steaming first the breast, then the back, and then each side. The whole process of steaming does not take more than two or three minutes, and the goose must be kept moving to prevent scalding the flesh. A goose may also be steamed by scalding slightly and wrapping the body tightly for five minutes or longer in burlap or cloth to allow the steam to work thoroughly through the feathers. The goose is steamed until the feathers can be pulled out easily, and the head is usually laid under the breast to keep the breast from scalding. The bird is then singed over an alcohol flame, the alcohol usually being burned in shallow, tin plates. Some markets prefer dry-picked geese, while in other markets no difference is made in the price of scalded or dry-picked geese.

After the geese are picked they are usually washed and put into ice or cold water to cool. Dressed geese are shipped packed in well-ventilated barrels in cool weather without ice, each goose being wrapped in paper with the head left out of the package. "Noodled" geese average about 25 or 26 pounds in weight, and individual weights of nearly 40 pounds have been obtained. Many farmers sell their geese alive, either to fatteners or for immediate slaughter.

PLUCKING LIVE GEESE

The plucking of feathers from live geese has been practiced for many centuries. Some breeders of geese in the South and a few in the Middle West and the North pluck the feathers from the live geese at some time prior to molting. A few pick as often as every six weeks during the spring, summer, and early in the fall, while others pick only once or twice a year, either in the spring or in both spring and fall. This practice of plucking geese, however, is considered by many breeders to be cruel and injurious. Only feathers are picked when the quills appear dry and do not contain blood. Both young and old geese are plucked. About 1 pound of feathers may be plucked from a goose during a year. The feathers should never be pulled after November 15, in order that the geese will be in full feather for marketing. Geese should not be picked during the breeding season. In plucking, a stocking is usually put over the head of the goose and the soft feathers on the breast, back, sides, and abdomen are pulled. Five quill feathers are pulled from each wing. Short feathers enough to support the wings should always be left. The following prices per pound for geese feathers were quoted in Cincinnati, Ohio, in October, 1927: Pure white, \$1; average white, 80 cents; gray, 70 cents. These prices are for good dry feathers. The feathers should be partly cured before they are shipped, which may be done by placing them in loosely woven, burlap sacks which are hung in the loft of a building where they get good air circulation from all sides. Sacks of these feathers should not be laid on the floor or packed on top of one another until they are thoroughly dry. The demand for goose feathers and the practice of plucking geese appear to be decreasing, while more attention is being given to the production of young geese for market.